PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P TM81170 PC-BU FOR FURTH			ION	See Form PCT/IPEA/416		
International application No. International filing			day/month/year)	Priority date (day/month/year)		
PCT/DE2004/000803 16.04.200				03.11.2003		
Internati	onal Patent Classification (IPC) or na	ional classification and IPC				
G01	G01 N21/55, B60S1/08					
	Applicant ADC AUTOMOTIVE DISTANCE CONTROL SYSTEMS GMBH					
1.	 This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 					
2.	This REPORT consists of a total of	5	sheets, including	g this cover sheet.		
3.	This report is also accompanied by	ANNEXES, comprising:				
	a. (sent to the applicant and	l to the International Burea	u) a total of 2	sheets, as follows:		
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental					
	Box.	(D	Park and Table			
	b (sent to the International	Bureau only) a total of (ind	icate type and number	r of electronic carrier(s))		
	, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see					
	Section 802 of the Admini	•	dicated in the Supple.	mental Box Relating to Sequence Listing (see		
4.	This report contains indications relat	ing to the following items:				
	Box No. I Basis of th	e report				
	Box No. II Priority					
	Box No. III Non-estable	ishment of opinion with reg	ard to novelty, invent	ive step and industrial applicability		
	Box No. IV Lack of un	ity of invention				
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
	Box No. VI Certain do	cuments cited				
	Box No. VII Certain de	fects in the international app	lication			
	Box No. VIII Certain ob	servations on the internation	al application			
Date of submission of the demand Date of			te of completion of thi	is report		
Name and mailing address of the IPEA/EP			thorized officer			
Facsimile No			enhone No			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/DE2004/000803

Box	No. I	I Basis of the report			
1.		h regard to the language, this report is based on the internati cated under this item.	onal application in the language in	which it was filed, unless otherwise	
	This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of: international search (Rule 12.3 and 23.1(b)) publication of the international application (Rule 12.4)				
		international preliminary examination (Rule 55.2 and	d/or 55.3)		
2.	With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report): the international application as originally filed/furnished the description:				
		pages 1-4		as originally filed/furnished	
		pages*	received by this Authority on		
		pages*	received by this Authority on		
	\boxtimes	the claims:			
		nos.		as originally filed/furnished	
		nos.*	as amended (togethe	er with any statement) under Article 19	
		nos.* 1-6	received by this Authority on	22.04.2005 with letter of 19.04.2005	
		nos.*	received by this Authority on		
	\boxtimes	the drawings:			
		sheets <u>1/2-2/2</u>		as originally filed/furnished	
		sheets*	_ received by this Authority on		
		sheets*	_ received by this Authority on		
		a sequence listing and/or any related table(s) – see Supple	mental Box Relating to Sequence L	isting.	
3.	\boxtimes	The amendments have resulted in the cancellation of:			
		the description, pages			
		the claims, nos. 7			
		the sequence listing (specify):			
4.		This report has been established as if (some of) the amenthey have been considered to go beyond the disclosure as a	dments annexed to this report and	l listed below had not been made, since	
		the description, pages			
		the claims, nos.			
		the drawings, sheets/figs			
		the sequence listing (specify):			
	any table(s) related to sequence listing (specify):				
*	If ite	em 4 applies, some or all of those sheets may be marked "su	perseded."		

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/DE2004/000803

Box No. V		Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
1.	Statement					
	Novelty	(N)		1-6	YES NO	
	Inventiv	e step (IS)		1-6	YES NO	
	Industria	d applicability (IA)		1-6		
2.	Citations an	d explanations (Rule 7	0.7)			
	Reference is made to the following documents:					
	D1:	FR-A-2 781 576 (VALEO SYSTEMES ESSUYAGE) 28 January 2000 (2000-01-28)				
	D4:	_		CORP) 7 July 1999 (1999-07-		
	1.	The subject matter of claim 1 is novel within the meaning of PCT Article 33(2) and involves an inventive step within the meaning of PCT Article 33(3).				
		page 1, 1	ines 1-23:	a device having a transmission and reception unit which sends light into a defined target area and detects and evaluates incoming light, wherein: for the detection of dirt on a transparent cover pane an input-coupling and an output-coupling spot is disposed in a defined		

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
		position, in such a way	
		that	
	figure 1;	means (32, 22, 28) for the	
	page 1, line 24, to	input-coupling of light are	
	page 2, line 7	provided which inject the	
		light at a defined input-	
		coupling spot in a	
		defined direction laterally	
		into the cover pane and the	
		light traverses the cover	
		pane lengthways, and	
	figure 1;	means for the detection	
	page 2, lines 7-17	(20) of the portion of	
		light arriving at the	
		defined light output-	
		coupling spot (34) are	
		provided and the degree of	
		contamination with dirt is	
		deduced from this portion.	
1.2	1.2 The subject matter of claim 1 differs from the		
disclo	disclosures in document D1 in that		
	(a) the transmission and reception unit is part of		
	an optical environment recognition system, and		
	(b) the scanning beam can be pivoted over the		
	recognized target area, and		
	(c) the input-coupling and output-coupling spot is		
	disposed at a pivot position of the scanning beam.		

International application No.
PCT/DE2004/000803

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Consequently, the subject matter of claim 1 is novel (PCT Article 33(2)).

- 1.3 The problem solved by features (a) to (c) is that of using the same transmission and reception unit for a recognition of the environment (seat occupation, distance control) in one pivot position and to measure contamination with dirt of the cover pane in another pivot position.
- 1.4 Document D4 discloses a device (see paragraph 39, lines 15-20, paragraph 64, figure 1) for error detection in transparent panes, wherein the light beam is pivotable so as to evaluate different areas of the pane.

However, this device does not permit for environment recognition as described in the subject matter of claim 1.

- 1.5 For these reasons the subject matter of claim 1 would not appear to be obvious to a person skilled in the art. Consequently, claim 1 involves an inventive step (PCT Article 33(3)).
- 2. Claims 2-6 are dependent on claim 1 and therefore likewise meet the PCT requirements for novelty and inventive step.